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Self-help for binge eating disorder in primary care: A randomized controlled trial with ethnically and racially diverse obese patients

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ABSTRACT

Objective: The objective was to examine the effectiveness of a self-help treatment as a first line primary care intervention for binge eating disorder (BED) in obese patients. This study compared the effectiveness of a usual care plus self-help version of cognitive behavioral therapy (shCBT) to usual care (UC) only in ethnically/racially diverse obese patients with BED in primary care settings in an urban center.
Method: 48 obese patients with BED were randomly assigned to either shCBT ($N = 24$) or UC ($N = 24$) for four months. Independent assessments were performed monthly throughout treatment and at post-treatment.
Results: Binge-eating remission rates did not differ significantly between shCBT (25%) and UC (8.3%) at post-treatment. Mixed models of binge eating frequency determined using the Eating Disorder Examination (EDE) revealed significant decreases for both conditions but that shCBT and UC did not differ. Mixed models of binge eating frequency from repeated monthly EDE-questionnaire assessments revealed a significant treatment-by-time interaction indicating that shCBT had significant reductions whereas UC did not during the four-month treatments. Mixed models revealed no differences between groups on associated eating disorder psychopathology or depression. No weight loss was observed in either condition.
Conclusions: Our findings suggest that pure self-help CBT did not show effectiveness relative to usual care for treating BED in obese patients in primary care. Thus, self-help CBT may not have utility as a front-line intervention for BED for obese patients in primary care and future studies should test guided-self-help methods for delivering CBT in primary care generalist settings.

Binge-eating disorder (BED) is defined by recurrent binge eating (eating unusually large quantities of food accompanied by feelings of loss of control), marked distress, and the absence of inappropriate weight compensatory behaviors that characterize bulimia nervosa. The disorder is prevalent and is associated with obesity (Hudson, Hiripi, Pope, & Kessler, 2007), elevated risk for medical (Johnson, Spitzer, & Williams, 2001), and psychiatric co-morbidity (Grilo, White, & Masheb, 2009). BED has diagnostic validity, is distinct from other eating disorders (Grilo, Crosby, et al., 2009) and obesity (Grilo et al., 2008), and is a formal eating disorder in the *DSM-5* (American Psychiatric Association, 2013).

Research has found that certain psychological treatments are effective for BED (Wilson, Grilo, & Vitousek, 2007). Of these, cognitive-behavioral therapy (CBT), is the most widely studied and best-established treatment for BED (NICE, 2004; Wilson et al., 2007). CBT has demonstrated "treatment specificity" (Grilo, Masheb, & Wilson, 2005) and durable outcomes for 12-months (Grilo, Crosby, Wilson, & Masheb, 2012; Grilo, Masheb, Wilson, Gueorguieva, & White, 2011) through 48-months (Hilbert, Bishop, Stein, & Wilfley, 2012) following treatment in specialist clinics.

Unfortunately, despite the existence of empirically-supported CBT methods for BED and other eating disorders (Wilson et al., 2007), only a small number of individuals with eating/weight concerns receive mental health services (Marques et al., 2011), and even fewer receive treatments with documented effectiveness (Hart, Granillo, Jorm, & Paxton, 2011; Wilson & Zandberg, 2012). There is a shortage of clinicians with specialized training in CBT (Kazdin & Blase, 2011; Shafran, Clark, Fairburn, et al, 2009) in

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general, and this is particularly the case for eating disorders (Hart et al., 2011). Furthermore, research suggests that even clinicians who describe themselves as delivering CBT-based interventions for disordered eating do not follow most key aspects of empirically-supported CBT (Tobin, Banker, Weisberg, & Bowers, 2007; Waller, Stringer, & Meyer, 2012). Thus, one of the most pressing research needs facing the eating disorder field is for research on greater dissemination of effective treatment methods (Shafran et al., 2009; Wilson & Zandberg, 2012).

In an effort to address the need for dissemination of effective interventions, initial treatment studies with various forms of guided self-help and "pure" self-help CBT have shown promise for addressing BED (NICE, 2004; Sysko & Walsh, 2008; Wilson & Zandberg, 2012). Controlled trials have found that "guided" self-help CBT – that is, with some form of facilitation or guidance by a clinician – has efficacy for BED across diverse clinical and community settings (see critical reviews by Sysko & Walsh, 2008; Wilson & Zandberg, 2012), with one controlled trial documenting "treatment-specificity" for guided self-help CBT versus guided self-help behavioral weight loss (Grilo & Masheb, 2005). Much less research, however, has examined "pure" self-help CBT - that is, self-help that is purely self-directed and without guidance from a clinician. While inspection of findings across studies suggests that pure self-help tends to be less beneficial than guided self-help (Sysko & Walsh, 2008; Wilson & Zandberg, 2012), only three studies that have directly tested pure self-help CBT for BED against no-self-help (i.e., wait-list) and these have yielded mixed results. Carter and Fairburn (1998) and Peterson et al. (1998) found that pure self-help CBT was superior to wait-list control in trials performed with a community-based sample and in a specialty clinic, respectively. More recently, however, in a larger trial Peterson, Mitchell, Crow, Crosby, and Wonderlich (2009) found that self-help CBT was not superior to wait-list control in a trial performed at a specialty clinic. Thus, further research is needed on the effectiveness of self-help CBT methods for BED across diverse settings (Wilson & Zandberg, 2012).

The existing treatment literature for BED is based mostly on trials performed in specialist research clinics and findings may not generalize adequately due to potential confounds associated with various clinic biases (Grilo, Lozano, & Masheb, 2005) or to more diverse patient groups comprising different ethnic/racial minorities (Franko, Thompson-Brenner, Thompson, et al, 2012). For example, African-American and Hispanic groups are vastly underrepresented in the existing treatment literature for BED (Franko et al., 2012) with participation rates that are much lower than expected based on prevalence rates reported in epidemiological studies (Alegria et al., 2007; Marques et al., 2011). The three RCTs testing pure self-help CBT for BED consisted of 97% (Carter & Fairburn, 1998), 96.1% (Peterson et al., 1998), and 96.5% (Peterson et al., 2009) white participants. Furthermore, studies have found that minority groups with eating disorders have lower mental health utilization rates than whites and receive most of their health care from generalist or primary care settings rather than specialists (Marques et al., 2011).

The present study was designed to provide new information about the effectiveness of (pure) self-help CBT – initiated by generalist clinicians – as a potential first-step intervention method in primary care. BED is associated with increased healthcare service utilization in general primary care settings (Johnson et al., 2001) but binge eating problems are infrequently identified by general healthcare providers (Mond, Myers, Crosby, Hay, & Mitchell, 2010). In addition to gaining a better understanding of the effectiveness of pure self-help CBT and extending research into generalist medical settings, there is a pressing need for treatment research to include more diverse patient groups (Franko et al., 2012). Thus, this RCT was designed to provide information about the effectiveness of self-help CBT amongst a diverse sample of patients with BED in a highly relevant generalist medical setting.

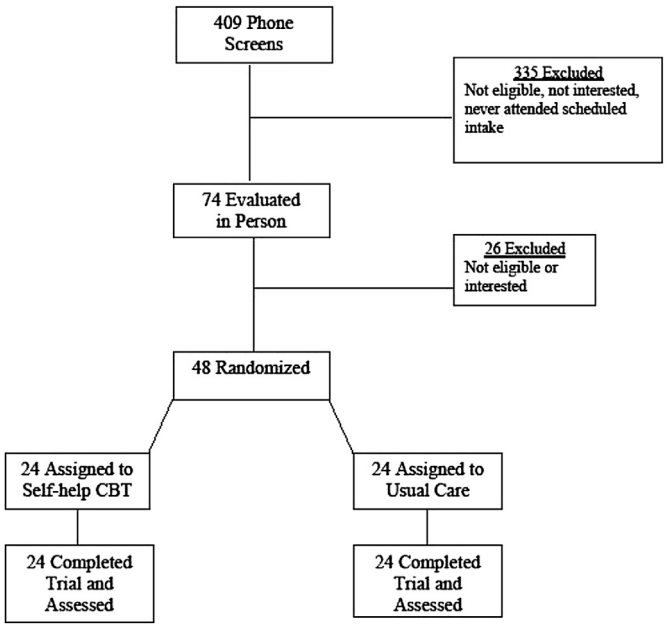

Fig. 1. Flow of participants throughout the study.

Methods

Participants

Participants were 48 consecutively evaluated obese patients who exceeded *DSM-5* criteria for BED and were randomized to treatment. The participants were respondents for a treatment study for weight loss and binge eating being performed in primary care in a large university-based medical health-care center in an urban setting. Participants were recruited using posters and flyers placed throughout primary care office settings in addition to "word-of-mouth" and referrals initiated by primary care physicians; we did not use newspaper or other media to recruit. Participants were required to be obese (body mass index (BMI) $\geq$ 30) and exceed proposed *DSM-5* criteria for BED such that the stricter duration criteria of 6 months from the *DSM-IV-TR* was used, as opposed to 3 months.[1]

Recruitment for the treatment study was intended to enhance generalizability by utilizing relatively few exclusionary criteria. Exclusion criteria included BMI $\geq$ 50, over 65 years of age, current antidepressant therapy, current weight loss treatment or current use of medications known to influence eating/weight, select severe psychiatric problems (schizophrenia, bipolar disorder, and current substance use disorder), severe medical problems (e.g., cardiac disease), and uncontrolled liver disease, hypertension, thyroid

[1] When we first designed this RCT, the DSM-5 criteria for BED were well researched but not yet finalized. To be able to address both criteria for DSM-IV-TR and the likely criteria for DSM-5, we included both the longer duration criteria (>6 months) and both cut-points for the frequency criteria (i.e., >twice weekly and >once weekly). This provided us the ability to stratify randomization by meeting "full" criteria for DSM-IV-TR frequency (frequency at least twice weekly OBE) and "subthreshold" (frequency at least once weekly) which was consistent with the literature at the time and ultimately allowed us to exceed DSM-5 criteria.